



**JOHN CHIANG**  
TREASURER  
STATE OF CALIFORNIA

January 29, 2018

Philip K. R. Pascall, Chairman and Chief Executive Officer  
First Quantum Minerals Ltd.  
14th Floor – 543 Granville Street  
Vancouver, BC  
Canada V6C 1X8  
E-Mail: [philip.pascall@fqml.com](mailto:philip.pascall@fqml.com)

Clive Newall, President  
330 Bay Street  
10th Floor  
Toronto, ON  
Canada, M5H 2S8  
E-Mail: [clive.newall@fqml.com](mailto:clive.newall@fqml.com)

Dear Messrs. Pascall and Newall:

I am in receipt of the attached correspondence from organizations and a consortium of Bristol Bay Native Tribes that oppose the Pebble Mine (“Pebble Project”) – the massive gold and copper mining operation proposed for the remote and ecologically sensitive headwaters of Bristol Bay, Alaska.

As a trustee of the two largest public pension funds in the United States, the California Public Employees’ Retirement System (CalPERS) and the California State Teachers’ Retirement System (CalSTRS), I am adding my voice to theirs in opposing the resurrection of this ill-conceived project. These pension funds wield combined assets totaling \$570 billion.

I am deeply familiar with the disturbing threats this project poses to the pristine environment, to fishing, to the economy, and to the indigenous peoples of the Bristol Bay region.

In 2013, acting in concert with then-City of New York Comptroller John Liu, I communicated these concerns to Rio Tinto – then a significant shareholder in the project. We urged divestment of the Pebble Project because of the financial and reputational risks Rio’s participation posed to our own shareholders and beneficiaries, both present and future. (See attached letter, Chiang and Liu to Walsh.)

In April 2014, Rio Tinto divested, donating 100 percent of its interest in the Pebble Project to two Alaskan non-profit organizations.

The California pension funds believe that sustainable business practices – particularly responsible environmental, labor, and human rights practices – are fundamental to protecting and creating long-term shareowner value. As a fiduciary of these funds, I cannot ignore the far-reaching economic implications and sustainability risks at play here. In my view, investment in the Pebble Project presents undue risk not only to the long-term sustainability of the Bristol Bay region, but also to the value of our long-term investments in First Quantum Minerals, Ltd.

Northern Dynasty Minerals – now sole owner of the Pebble Project and with which First Quantum has recently entered into an Option Framework Agreement -- has already warned investors that “[e]nvironmental concerns in general continue to be a significant challenge for Northern Dynasty . . . .Unexpected environmental damage from spills, accidents and severe acts of nature such as earthquakes are risks which may not be fully insurable and if catastrophic could mean the total loss of shareholders’ equity.”<sup>i</sup> The company acknowledged that “[i]t is possible that the costs and delays associated with compliance with such standards and regulations could become such that we would not proceed with the development or operation.”<sup>ii</sup>

I note with particular alarm that each of the three original major partners in the Pebble Project chose for financial reasons to abandon it – Mitsubishi in 2011, Anglo American in 2013, and Rio Tinto in 2014. For its part, Northern Dynasty Minerals attempted unsuccessfully in 2011 to sell its own interest.

For the reasons outlined in the attached correspondence and supporting documents – reasons that closely track those articulated to Rio Tinto several years ago by Comptrollers Liu, Scott Stringer, and myself – I am concerned that the Pebble Mine operation will trigger unavoidable significant environmental and social damage, infringe on the rights of indigenous peoples and raise a host of regulatory, operational, legal, and reputational risks for any company that pursues the endeavor.

In light of these risks, and as a fiduciary of substantial, long-term First Quantum Minerals shareholders, I request that you immediately undertake all measures necessary to sever any connections – financial or otherwise – with the Pebble Project or its owner Northern Dynasty Minerals, including termination of negotiations on a potential option agreement and any further financial payments to the Pebble Project.

I thank you for your prompt response.

Sincerely,



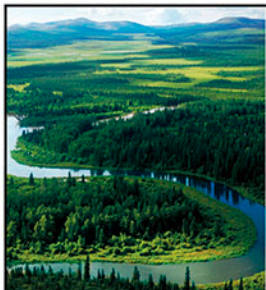
JOHN CHIANG  
California State Treasurer

---

<sup>i</sup> Northern Dynasty Minerals Ltd., Form 20-F, Securities and Exchange Commission, CIK Number 0001164771, for the fiscal year ended December 31, 2004, at 11.

<sup>ii</sup> Northern Dynasty Minerals Ltd., Management's Discussion and Analysis, Six Months Ended June 30, 2010, at 30.





# "THE PEBBLE MINE IS THE WRONG MINE IN THE WRONG PLACE."

**T**he question of whether to build a massive open pit copper and gold mine in the heart of the planet's largest wild sockeye salmon fishery has a simple answer. The Pebble Mine is the wrong mine in absolutely the wrong place, and the answer is no.

As proposed, Pebble would produce billions of tons of mining waste in the headwaters of the streams and rivers that flow into Alaska's Bristol Bay. The 40 to 60 million sockeye salmon that return each year to spawn in the Bristol Bay watershed support the largest commercial salmon fishery in the world, fueling a \$1.5 billion economy and 14,000 jobs.

Scientists recently completed a thorough, four-year review of the mine and its impacts on the watershed. The study found that the mine would destroy pristine wetlands, that roads and pipelines would slice through salmon-spawning streams, and that toxic chemicals would threaten Bristol Bay's waters.

Alaska Native communities have assessed the mine's impacts on their livelihoods and way of life and have reached the same conclusions. Commercial fishermen in Alaska say that "large-scale mineral development activities present serious risks for the Bristol Bay salmon fishery." They are among the 65 percent of Alaskan voters who believe the Pebble Mine poses an unacceptable threat to the state's fishing industry.

Even the mining companies initially backing the Pebble Mine have concluded it's a losing proposition. The mining

giant Rio Tinto abandoned the project in 2014. Anglo-American withdrew its 50 percent stake in the project in 2013, taking a \$500 million loss in the process. Mitsubishi Corporation sold out in 2011.

Understanding the project's risks, and at the request of Alaskan tribes, the Environmental Protection Agency pledged to use the federal Clean Water Act to protect Bristol Bay. Unfortunately, the last remaining company in the Pebble Limited Partnership sued to stop the Clean Water Act process, falsely claiming the EPA was acting outside of its authority.

This year, before the lawsuit was resolved but within months after the Trump Administration began, the EPA, now under the direction of Administrator Scott Pruitt, agreed behind closed doors to reverse course, settling the Pebble Partnership's lawsuit and abandoning the science-based Clean Water Act process intended to protect the Bristol Bay region and its fishery.

We oppose the Trump Administration's efforts to sweep nearly a decade of science and Clean Water Act review under the rug. The record is clear: The Pebble Mine is fundamentally flawed — it's the wrong mine in the wrong place.

And the choice is simple. Protect the greatest salmon fishery on the planet. Protect Alaskans and the Bristol Bay watershed.

Signed,

**William D. Ruckelshaus**

*EPA Administrator,  
Presidents Richard Nixon  
and Ronald Reagan*

**William K. Reilly**

*EPA Administrator,  
President George H.W. Bush*

**Bruce Babbitt**

*Secretary of the Interior,  
President William J. Clinton*

**Christine Todd Whitman**

*EPA Administrator,  
President George W. Bush*



COMMERCIAL FISHERMEN  
OF BRISTOL BAY



[www.nrdc.org/savebristolbay](http://www.nrdc.org/savebristolbay)



**united**  
TRIBES OF BRISTOL BAY



**BRISTOL BAY NATIVE ASSOCIATION**

December 21, 2017

***Via email and U.S. Mail to:***

Tom Collier  
Chief Executive Officer  
Pebble Limited Partnership  
3201 C Street, Suite 40  
Anchorage, AK 99503

**Re: Proposed Pebble Mine**

Mr. Collier:

We write to reiterate Bristol Bay's opposition to your proposed mine. If built, it will put habitat that is critical to one of the world's greatest remaining sockeye salmon fisheries at risk and is therefore an unacceptable threat to the communities, economy, and way-of-life of the region.

Recent statements by yourself and others associated with the Pebble Limited Partnership (PLP) and Northern Dynasty Minerals (NDM) continue to obfuscate important facts about Bristol Bay, its people, and your potential development plans. As PLP is filing for a Clean Water Act permit on the eve of the Christmas holidays, we take this opportunity to again ask that you be more honest brokers with respect to the mine's development scenarios, potential impacts to the Bristol Bay region, and your relationship with Bay communities and people.

Our organizations collectively represent the interests of fifteen Tribal governments and nine Alaska Native village corporations throughout the Bristol Bay region, as well as the interests of BBNC's 10,300 shareholders of Aleut, Eskimo, and Athabascan heritage with ancestral ties to Bristol Bay and the economic interests and opportunities for the residents of BBEDC's 17 member communities throughout the region. Together, our organizations represent the economic, cultural, and social foundations of Bristol Bay, Alaska, home of the world's most valuable wild salmon fishery.

The proposed Pebble mine entails insurmountable obstacles related to its size, type, and location. These are problems that cannot be engineered or avoided in any meaningful way.

### Mine Size

PLP is now stating that it will be pursuing a mine plan that entails a mine footprint of 5.4 square miles. At the same time, when you or other colleagues make presentations to mining investment audiences, you talk about Pebble as presenting a “generational opportunity” with proven reserve numbers that include the full extent of the ore deposit. These presentations also refer to the “new” mine plan as “the first phase” of development. It is clear that it is as much your intent now, as it was previously, to mine the fullest extent of the claims. This includes targeting exploration and development on 12 additional mineral deposits in the claim block area and turning the area into a mining district, as Ronald Thiessen recently alluded to at the Denver Gold Forum in September. In other words, your new mine plan is in reality the first phase of a segmented project, and your statements otherwise only serve to further validate our unyielding opposition to your project.

### Mine Location

Ronald Thiessen’s recent presentation about Pebble at the Silver and Gold Forum in San Francisco was notable for many reasons. Foremost amongst these, he referred to the deposit area as “effectively in the middle of nowhere. . . .” You can imagine how our constituents and members reacted to this description. The headwaters of the Nushagak and Kvichak drainages are not the middle of nowhere. It is where the salmon that are so vital to our region’s economic and social fabric, first rear. It is also our home. Given that PLP regularly extols the level of its social engagement, this comment was very revealing. It is comments like these that undercut PLP’s credibility and why the vast majority of people in Bristol Bay do not put any trust in the company’s promises or commitments.

### Fiscal Integrity

PLP is touting a new smaller mine plan and offering it to the public as the proving grounds for the project and your companies. PLP further portrays any future phases to the Project as hinging on the success of this first phase, as if there is a possibility that PLP might not seek to pursue any later phases. If there is any truth to this intent, then it should also be true that this first phase of development must be economically viable on its own. Yet PLP has yet to release an economic feasibility study for the project and you have directly told some of us that PLP cannot release such a plan prior to filing a permit application. Let us be clear: there are no legal impediments that preclude PLP from releasing an economic feasibility study now. PLP has spent the past few months advertising a mining footprint without first determining or releasing the economic feasibility of this plan, instead deferring a study of project economics until sometime in 2018 as indicated on NDM’s website. Given this suspect strategy and public pronouncements, it is incumbent upon PLP to prove to Alaskans that this new vision is economically viable without any additional, future development phases.

### Resource Independence

PLP’s website and some of the company’s prior project presentations have plugged the project as a means of boosting America’s “resource independence.” The reality is that the market for any raw materials extracted at Pebble is Asia. Ronald Thiessen was explicit about this reality in his Silver and Gold Summit comments. There he told the audience that the mine site was, “close to tidewater which gives us good access to oceans and shipment to Asia.” Touting Pebble as having the potential to assist America’s resource independence is false and disingenuous.

### Fishery Co-Existence

Yourselves and John Shively before you have always said that Pebble would co-exist with Bristol Bay's salmon and, if it could not, it should not be built. In PLP's current presentations, the company asserts that Pebble will affect less than 1/10<sup>th</sup> of 1% of the region's salmon fisheries and habitat. There is no credible scientific support for such a statement and, in fact, it is entirely at odds with the conclusions of the Bristol Bay Watershed Assessment; a document that went through two rounds of peer review and considered more than a million public comments.

PLP's percentage assertion is based on surface area of the total Bristol Bay watersheds that would be directly impacted, ignoring the productivity and importance of specific streams for salmon spawning and rearing habitat. Without question, the Nushagak and Kvichak watersheds where the Pebble ore deposit is located consistently produce over half of Bristol Bay's sockeye salmon. In 2017, those two watersheds produced more than 36 million sockeye salmon. In addition, the Watershed Assessment noted the particular importance of the North Fork Koktuli and the tributaries that Pebble would permanently alter or eliminate for coho and Chinook spawning and rearing habitat. Indeed, EPA found that the impacts to the North Fork Koktuli's coho and Chinook habitat (under a mine scenario smaller than Pebble is putting forth today) will be "unprecedented in the context of the CWA Section 404 regulatory program in Alaska."

### Social License

PLP has gone to great lengths to tout PLP's concern for a social license. Yet the company does so without paying mind to the vast majority of Bristol Bay residents who do not and will not support your proposal. Bristol Bay's stakeholders have told PLP for years that our region is not interested in a large-scale mining development in our backyard, at the headwaters of the world's greatest remaining wild sockeye salmon fishery. And yet the company presses on and persists. If PLP believes in operating only where it has local support, it should and would have concluded long ago that Bristol Bay was not the place to build this project.

### EPA Bristol Bay Watershed Assessment

Ronald Thiessen also told the Silver and Gold Summit audience that EPA has indicated that a mine with a footprint around the size of the mine that is currently proposed, i.e., with a 5.4 square-mile footprint, would be acceptable. This is patently false. The smallest mine size considered in the Bristol Bay Watershed Assessment had a footprint of 4.1 square miles, a good deal smaller than the mine footprint PLP is currently promoting. The Watershed Assessment concluded that a mine at Pebble with as small as a 4.1 square mile footprint would still present numerous unacceptable adverse impacts to the region and fisheries. And EPA has never sanctioned a mine smaller than 4.1 square miles. There is no fair way to read the Bristol Bay Watershed Assessment otherwise and it is disingenuous for anyone affiliated with Pebble to suggest any differently to any audience.

And perhaps most remarkably, PLP is entering the permitting process with the Proposed Determination in place after insisting for years that the Proposed Determination posed a bar. After thousands of comments from Bristol Bay residents, more than twenty-five thousand comments from Alaskans, and over a million comments from across the United States, all urging EPA not to rescind the Proposed Determination, the company now asserts that it can apply for a permit with the Proposed Determination still in existence.

PLP has announced that it intends to file its Clean Water Act permit application with the United States Corps of Engineers on December 22<sup>nd</sup>, the last business day before Christmas. In other words, you will be filing your permit as everyone else is leaving for the holidays; another classic obfuscation tactic.

Your actions place PLP and NDM historically in line with the worst of the Outsiders who have come to Bristol Bay to exploit the region's resources. We did not let that happen in other contexts and our region will not let it happen to our salmon fisheries and salmon habitat at your hand. Your activities and presentations do a disservice to and show no regard for the people of Bristol Bay. Pebble Mine simply is not welcome in our region.

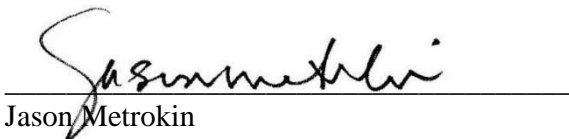
Sincerely,



Alannah Hurley  
Executive Director, United Tribes of Bristol Bay  
P.O. Box 1252  
Dillingham, AK 99576  
Phone: (907) 842-1687  
Fax: (907) 842-1853



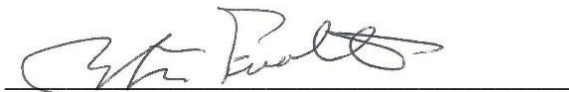
Norm Van Vactor  
President/CEO, Bristol Bay Economic Dev't Corp.  
PO Box 1464  
Dillingham, Alaska 99576  
Phone: (907) 842-4370



Jason Metrokin  
President/CEO, Bristol Bay Native Corporation  
111 West 16th Avenue, Suite 400  
Anchorage, AK 99501  
Phone: (907) 278-3602  
Fax: (907) 276-3924



Ralph Andersen  
President & CEO, Bristol Bay Native Association  
P.O. Box 310  
Dillingham, Alaska 99576  
Phone: (907) 842-5257  
Fax: (907) 842-5932



Myrtice Evalt  
Interim Executive Director, Nunamta Aulukestai  
PO Box 735  
Dillingham, AK 99576  
Phone: (907) 842-4404

Cc:

Philip Pascall, *Chairman & CEO, First Quantum Minerals Ltd.*  
Ronald Theissen, *President, CEO & Director, Northern Dynasty Minerals Ltd.*  
Members of the Pebble Limited Partnership's Advisory Committee  
Honorable Bill Walker, *Governor of Alaska*



Honorable Byron Mallott, *Lt. Governor of Alaska*

Honorable Lisa Murkowski, *U.S. Senate*

Honorable Dan Sullivan, *U.S. Senate*

Honorable Don Young, *U.S. House of Representatives*

Honorable Pete Kelly, *Alaska State Senate President*

Honorable Bryce Edgmon, *Alaska Speaker of the House*

Scott Pruitt, *EPA Administrator*

Todd T. Semonite, *U.S. Army Corps of Engr's, Commanding General & Chief of Engr's Lt. General*

Michael Brooks, *U.S. Army Corps of Engr's Alaska District Commander Col.*



January 11, 2018

John Chiang  
 California State Treasurer  
 915 Capitol Mall, Suite 110  
 Sacramento, CA 95814  
 (916) 653-2995  
[john.chiang@treasurer.ca.gov](mailto:john.chiang@treasurer.ca.gov)

Re: First Quantum Minerals and Pebble Mine

Dear Treasurer Chiang:

In the Fall of 2013, representing pension fund shareholders, you, as California Controller, and NYC Comptrollers John Liu and Scott M. Stringer communicated to Rio Tinto Chief Executive Sam Walsh your concerns about its investment in a uniquely destructive proposed gold and copper mining project called the Pebble Mine, to be located in the headwaters of Bristol Bay in southwest Alaska—home to the world’s largest and most valuable wild salmon fishery. As you know, in the wake of those communications (copy of the correspondence attached), Rio Tinto elected to abandon 100 percent of its interest in that reckless project, donating all of its shares to two Alaskan non-profit organizations. Following Rio Tinto’s withdrawal, only one small underfunded Canadian mining company—Northern Dynasty Minerals Ltd.—remained, with no other assets than the Pebble Mine.

We regret now to report that, after several years of looking for a new funding partner, Northern Dynasty Minerals entered into a framework agreement last month with First Quantum Minerals Ltd. (FQML) that, if confirmed in an option agreement, will give First Quantum the option to purchase a 50% interest in the Pebble Project. The option agreement is contingent upon, among other things, further due diligence and is expected to occur early in Q2 2018.<sup>i</sup>

**Because the State of California is a significant shareholder of First Quantum Minerals, we would like to highlight for your renewed attention the regulatory, operational, legal, financial, political and reputational risks associated with the Pebble Project.**

The Pebble Project (or “Pebble Mine”), proposed on State of Alaska lands, will include the following mine facilities and infrastructure:<sup>ii</sup>

- 188 miles of new natural gas pipeline across Cook Inlet and across Lake Iliamna, the largest undeveloped lake in the U.S.<sup>iii</sup>
- 83 miles of roads across lands owned by multiple entities, including the State of Alaska and Alaska Native Corporations
- a 230 MW power plant
- a port facility on Lake Iliamna for 25 concentrate vessels and 25 barges
- a massive marine port facility on the western shore of Cook Inlet, in waters designated as critical habitat for endangered Cook Inlet beluga whales
- mine facilities that includes 1.1 billion tons of mine tailings storage; and a final pit of 6,500 feet in length and 1,750 feet in depth.

Individually, each of these facilities is a significant undertaking, but collectively, the permitting, logistical and political challenges of the mine and related infrastructure are unparalleled.

## **1. Financial Risks**

All the major investors in the proposed Pebble Mine had withdrawn from the project. Mitsubishi sold in 2011. Anglo American withdrew in 2013 after spending more than \$540 million dollars to develop the mine and writing down \$300 million in additional losses to withdraw, citing a desire to focus on projects with the “highest value and lowest risks.”<sup>iv</sup> Rio Tinto walked away in 2014, donating all its Northern Dynasty Minerals shares to two Alaskan charitable foundations.<sup>v</sup>

Northern Dynasty Minerals’ recent consolidated financials explicitly acknowledge the critical need to obtain additional financing, as well as “substantial doubt about the Company’s ability to continue.”

As of September 30, 2017, [Northern Dynasty] has working capital of \$25.4 million. The Group incurred a net loss of \$17.8 million, \$27.0 million and \$33.8 million during the years ended December 31, 2017, 2016 and 2015, respectively. Additional financing will be required in order to progress any material expenditures at the Pebble Project beyond 2017...There can be no assurances that the Group will be successful in obtaining additional financing. If the Group is unable to raise the necessary capital resources and generate sufficient cash flows to meet obligations as they come due, the Group may, at some point, consider reducing or curtailing its operations. As such there is material uncertainty that raises substantial doubt about the Company’s ability to continue as a going concern.<sup>vi</sup>

Those consolidated financial statements also acknowledge that the company is still in the process of “exploring and developing the Pebble Project and has not yet determined whether the Pebble Project contains mineral reserves that are economically recoverable.”<sup>vii</sup>

Northern Dynasty Minerals even warned investors that “[e]nvironmental concerns in general continue to be a significant challenge for Northern Dynasty . . . . Unexpected environmental damage from spills, accidents and severe acts of nature such as earthquakes are risks which may not be fully insurable and if catastrophic could mean the total loss of shareholders’ equity.” The company acknowledged that “[i]t is possible that the costs and delays associated with compliance with such standards and regulations could become such that we would not proceed with the development or operation.”<sup>viii</sup>

For many of the reasons discussed in this letter, including the substantial cost of project

infrastructure, New York-based investment firm Kerrisdale Capital Management concluded that Northern Dynasty Minerals is “worthless” and the Pebble Project is “not commercially viable.”<sup>ix</sup>

## **2. Indigenous Opposition**

The predominant Alaska Native cultures present in the Bristol Bay watersheds—the Yup’ik and Dena’ina—are two of the last intact, sustainable, salmon-based cultures in the world.<sup>x</sup> Salmon are the lifeblood of Bristol Bay Native culture, providing not only subsistence food and subsistence-based livelihoods, but also a foundation for their language, spirituality, and social structure. There is overwhelming local opposition to the Pebble Project by Bristol Bay Native Tribes and corporations, including the Bristol Bay Native Corporation (a multi-billion dollar developer and the largest land-owner in the Bristol Bay region representing over 10,000 native shareholders), the Bristol Bay Native Association (a non-profit corporation and tribal consortium serving the 31 federally recognized tribes in the Bristol Bay region), United Tribes of Bristol Bay (a consortium of 15 federally recognized tribes in the Bristol Bay region opposed to the Pebble Mine), and Nunamta Aulukestai (a consortium of 10 native village corporations in the Bristol Bay region opposed to the Pebble Mine). A survey released by the Bristol Bay Native Corporation found that 81 percent of its native shareholders strongly oppose the mine.<sup>xi</sup> The people of Bristol Bay have made it clear that Northern Dynasty will not obtain social license to operate the mine, and they have repeatedly used political, legal and regulatory mechanisms to oppose it. For additional information, please see the attached letter from Bristol Bay leaders to Northern Dynasty reiterating their relentless opposition.

## **3. Political Opposition and Reputational Risk**

Over 80 percent of Bristol Bay residents and 85 percent of commercial fishermen in Bristol Bay oppose the mine.<sup>xii</sup> State opposition to the Pebble Mine is also strong. In November 2014, Alaska voters passed—with 65 percent of the vote (or more) in every precinct across the state—the anti-Pebble “Bristol Bay Forever” initiative.<sup>xiii</sup> The initiative requires the Alaska legislature to issue an affirmative finding (in the form of a duly enacted bill) that the mine would not harm wild salmon within the Bristol Bay Fisheries Reserve.

Opposition to the Pebble Mine is not limited to Alaska. For instance, 77 percent of Americans in the lower 48 oppose the Pebble Mine.<sup>xiv</sup> That opposition crosses ideological, political, gender, and age group lines. Just last month former Environmental Protection Agency (“EPA”) Administrators from every Republican Administration from Nixon to George W. Bush (except one – the Ford Administration, whose EPA Administrator is deceased) signed a statement in opposition to the Pebble Mine. The brief but unequivocal bipartisan statement (attached)—which ran as a full-page ad in the Washington Post on December 12th—is signed by former EPA Administrators William D. Ruckelshaus (Presidents Nixon and Reagan), William K. Reilly (President George H.W. Bush), and Christine Todd Whitman (President George W. Bush). The statement is also joined by former Secretary of the Interior Bruce Babbitt (President William J. Clinton), whose former Chief of Staff Tom Collier is the CEO of the Pebble Partnership. The message is clear: “The Pebble Mine is the wrong mine in absolutely the wrong place.” This statement by former EPA Administrators with regard to a matter pending before a successor EPA Administrator is virtually unprecedented and demonstrates the singular opposition that this project faces.

The Pebble Mine is also an international pariah. In 2016, the IUCN World Conservation Congress adopted a motion that opposes the Pebble Mine and urges the United States government to deny any permits. Members include 217 countries and government agencies and more than 1,000 domestic and international NGOs, which rely on more than 16,000 experts around the world to address the most significant global threats to conservation.<sup>xv</sup> And the Pebble Mine is included in that list of global threats.

Given the local, state, federal and international opposition, any association with the Pebble Project could result in substantial adverse public relations and potential customer and investor backlash, as happened with mountaintop removal mining. Prominent jewelers like Tiffany & Co., Helzberg Diamonds, Zale and Jostens have expressed their opposition to the Pebble Mine and vowed not to use gold extracted from it (see attached Tiffany & Co. ad in the New York Times).<sup>xvi</sup>

#### 4. Environmental Risks

If fully developed, the Pebble Project would be one of the largest mines in North America, producing up to 10 billion tons of mining waste that would have to be stored—forever—in the rivers, streams and wild lands of Bristol Bay’s high-quality salmon habitat. Salmon are the economic backbone of the region and contribute as well to the regional community’s cultural foundation. An economic report released by researchers at the University of Alaska found that the Bristol Bay commercial salmon fishery is worth \$1.5 billion annually, making it the most valuable wild salmon fishery in the world.<sup>xvii</sup> Not only do salmon sustain a prized commercial fishery, they also sustain world-class sports fishing, a subsistence-based economy for Alaska Natives, and 14,000 jobs.<sup>xviii</sup>

The EPA conducted a scientific assessment of the Bristol Bay watershed to understand impacts from large-scale mining like the proposed Pebble Mine on Bristol Bay fisheries—and the consequent effects on wildlife and Alaska Native cultures in the region. EPA’s Bristol Bay Watershed Assessment—which was subject to extensive public comment and two rounds of expert peer review—concluded that the Bristol Bay fishery was “unequaled in the world” and the Pebble Mine would have “significant” impacts on fish populations and streams surrounding the mine site. It also concluded that a tailings dam failure would have “catastrophic” effects on the region.<sup>xix</sup>

EPA underscored that even the smallest mine footprint analyzed in the Bristol Bay watershed assessment, which is larger than the footprint outlined in the 2017 revised Pebble mine plan, will have “significant and unacceptable adverse effects.”<sup>xx</sup> Northern Dynasty’s 2017 permit application calls for the destruction of 3,190 acres of wetlands and other waters,<sup>xxi</sup> nearly three times the amount (1,100 acres) identified in the Bristol Bay Watershed Assessment as posing unacceptable adverse impacts to the ecosystem.<sup>xxii</sup>

#### 5. Regulatory Risks

The EPA has the unequivocal authority under Section 404(c) of the Clean Water Act to stop dredge and fill projects “whenever” failure to do so would result in unacceptable adverse environmental effects.<sup>xxiii</sup> Six federally-recognized tribes in Alaska petitioned EPA to use its authority under Section 404(c) to protect Bristol Bay from large-scale mining like the Pebble Mine. EPA received similar requests from the Bristol Bay Native Corporation, the Bristol Bay Native Association, United Tribes of Bristol Bay, Nunamta Aulukestai, commercial fishing and sportsmen groups, chefs, jewelers, investors, churches, business owners, and environmental and conservation groups. In response, EPA conducted the Bristol Bay Watershed Assessment discussed above. Based on this information, in July 2014 EPA issued a Proposed Determination under Section 404(c) of the Clean Water Act to restrict the use of certain waters in the Bristol Bay watershed for disposal of dredged or fill material associated with developing the Pebble Mine.<sup>xxiv</sup> If finalized, EPA’s Proposed Determination would impose restrictions on the size of the Pebble Mine. **As described above, the proposed restrictions would preclude the proposed 2017 revised Pebble Mine plan, which calls for the destruction of nearly 3 times the wetland acres authorized in the Proposed Determination.**



Under the new leadership of President Donald Trump and EPA Administrator Scott Pruitt, however, the agency has reversed course and may withdraw its 2014 Proposed Determination.<sup>xxv</sup> Regardless of whether this administration withdraws the EPA's 2014 Proposed Determination, it remains clear that EPA's Bristol Bay Watershed Assessment provides indisputable evidence of the "unacceptable adverse impacts" that large-scale mining would cause in the region. In other words, even if EPA withdraws its 404(c) Proposed Determination *now*, the agency could proceed at any time in the future. This creates even greater risk and uncertainty for the project.

The D.C. Court of Appeals has held that EPA may "prohibit/deny/restrict/withdraw a specification *at any time*"—before, during, *or after* the permitting process.<sup>xxvi</sup> A mining permit could easily be withdrawn, therefore, even after significant funds (beyond the hundreds of millions already invested) have been expended for research, development, and construction. **The threat of a federal permit denial or withdrawal will never go away.** According to the Army Corps of Engineers, the permitting process for a project of this size typically takes four to five years. Therefore, the final permit decision for this project is almost certain to occur in the next Administration.

In addition to EPA's power to prohibit or restrict the mine at any time, the state of Alaska also has the regulatory power to block the project. Alaska Governor Bill Walker, an independent, is on record against the mine: "Based on the information available to me now, I do not support the Pebble Mine."<sup>xxvii</sup> Governor Walker also said that constructing the mine "presents formidable challenges" given the valuable fishery and the rural village life that depends on it. The "Bristol Bay Forever" initiative, passed in 2014, also has the potential to derail the project. The initiative protects the Bristol Bay watershed from large-scale sulfide mining (like the proposed Pebble Mine) that would harm wild salmon by requiring an affirmative finding from the Alaska legislature that mining would not be harmful to wild salmon within the Bristol Bay Fisheries Reserve.<sup>xxviii</sup>

## 6. Operational Risks

To transport gold and copper from the mine site to market, Northern Dynasty Minerals will have to construct massive infrastructure, including a marine terminal in Cook Inlet, a 233 MW power plant, 83 miles of roads, and 122 miles of natural gas pipeline across Cook Inlet and across Lake Iliamna - the largest undeveloped lake in the U.S. In order to construct the road, Northern Dynasty Minerals must acquire access rights from area landowners and the State of Alaska. The natural gas pipeline must be routed adjacent to Augustine Island, an active volcano in Cook Inlet, which last erupted in 2006.<sup>xxix</sup> Numerous native corporations, tribes and other residents currently oppose the mine and will not willingly provide access rights.

## 7. Legal Risks

A coalition of local communities, tribal governments, the commercial and sport fishing industries, conservation groups, sports groups, and numerous business interests have formed to oppose the mine. Stakeholders have filed challenges against the exploration permit, land use plan, and water rights for the project, as well as intervened on behalf of EPA in lawsuits filed by the Pebble Partnership. Should the Pebble Project ever reach final permitting, additional lawsuits are inevitable.

## Conclusion

For many of the reasons discussed above, local opposition to the Pebble Project is unwavering. "Thanks but no thanks," wrote tribal, economic, and political leaders of Bristol Bay in an op-ed

published this summer in Alaska. “Bristol Bay has thought this over for a long time, and we have long since made up our minds: Pebble mine is not welcome here. The discussion is over.”<sup>xxx</sup>

“The Pebble Mine is, and always will be, the wrong mine in the wrong place,” wrote the chairman of the board of Bristol Bay’s Native Corporation—the largest land-owner in the Bristol Bay region representing over 10,000 native shareholders—in an anti- Pebble op-ed published in connection with Northern Dynasty Minerals’ 2017 shareholder meeting.<sup>xxxii</sup>

The long-term political risks associated with this project are substantial. Given the absence of social, regulatory and legal licensing, we believe that expending funds to advance the Pebble Project is imprudent.

As a signatory to the Principles of Responsible Investment (PRI), which expressly recognizes “that environmental, social and corporate governance issues can affect the performance of investment portfolios,” and commits the signatories to incorporating ESG issues into analysis and decision making, we urge your consideration of these issues.<sup>xxxii</sup>

We deeply appreciate your past engagement with respect to the Pebble Mine, and we would welcome the opportunity to discuss our ongoing concerns with you in further detail at your earliest convenience. Please contact Taryn Kiekow Heimer at [tkiekowheimer@nrdc.org](mailto:tkiekowheimer@nrdc.org) or 310-434-2300 to schedule a meeting. Thank you in advance for your attention to this matter.

Sincerely,



Robert Heyano  
President  
United Tribes of Bristol Bay



Taryn Kiekow Heimer  
Senior Advocate  
Natural Resources Defense Council



Ralph Andersen  
President & CEO  
Bristol Bay Native Association



Kristina Andrew  
Director  
Sustaining Bristol Bay Fisheries



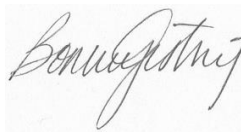
Myrtice Evalt  
Interim Executive Director  
Nunamta Aulukestai



Tim Bristol  
Executive Director  
Salmon State



Guido Rahr  
President & CEO  
Wild Salmon Center



Bonnie Gestring  
NW Program Director  
Earthworks

Cc  
Audrey Noda

---

<sup>i</sup>First Quantum Minerals Enters into a Framework Agreement with Northern Dynasty Minerals, Dec. 18, 2017, available at <http://www.first-quantum.com/Media-Centre/Press-Releases/Press-Release-Details/2017/First-Quantum-Minerals-Enters-into-a-Framework-Agreement-with-Northern-Dynasty-Minerals/default.aspx>.

<sup>ii</sup> Pebble Project Department of the Army Application for Permit (Dec. 2017), available at [http://www.poa.usace.army.mil/Portals/34/docs/regulatory/plp/12\\_22\\_2017\\_POA\\_2017-271\\_DA\\_Application\\_Pebble\\_Limited\\_Partnership.pdf?ver=2018-01-05-115756-287](http://www.poa.usace.army.mil/Portals/34/docs/regulatory/plp/12_22_2017_POA_2017-271_DA_Application_Pebble_Limited_Partnership.pdf?ver=2018-01-05-115756-287).

<sup>iii</sup> EPA, An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska, 910-R-14-001A (Jan. 2014), available at [https://www.epa.gov/sites/production/files/2015-05/documents/bristol\\_bay\\_assessment\\_final\\_2014\\_es.pdf](https://www.epa.gov/sites/production/files/2015-05/documents/bristol_bay_assessment_final_2014_es.pdf) (p. 4),

<sup>iv</sup> Bradford Weiners, Why Miners Walked Away From the Planet's Richest Undeveloped Gold Deposit, Bloomberg, Sept. 30, 2013, available at <https://www.bloomberg.com/news/articles/2013-09-27/why-anglo-american-walked-away-from-the-pebble-mine-gold-deposit>.

<sup>v</sup> Cecilia Jamasmie, Rio Tinto walks away from massive Pebble copper-gold project, Mining.com, April 7, 2014, available at <http://www.mining.com/rio-tinto-walks-away-from-massive-pebble-copper-gold-project-38240/>

<sup>vi</sup> Northern Dynasty Minerals Ltd., Consolidated Financial Statements, for the years ended December 31, 2016 and 2015, at 7.

<sup>vii</sup> Northern Dynasty Minerals Ltd., Consolidated Financial Statements, for the 3 years and nine months ended September 2017, at 6.

<sup>viii</sup> Northern Dynasty Minerals Ltd., Form 20-F, Securities and Exchange Commission, CIK Number 0001164771, for the fiscal year ended December 31, 2004, at 11.

<sup>ix</sup> Kerrisdale Capital, Northern Dynasty Minerals Ltd. (NAK) Cu at Zero, February 2017, available at <https://www.kerrisdalecap.com/wp-content/uploads/2017/02/Northern-Dynasty-Minerals-NAK.pdf> (disclosing that Kerrisdale Capital has short positions in the stock of Northern Dynasty Minerals.)

<sup>x</sup> [https://www.epa.gov/sites/production/files/2015-05/documents/bristol\\_bay\\_assessment\\_final\\_2014\\_es.pdf](https://www.epa.gov/sites/production/files/2015-05/documents/bristol_bay_assessment_final_2014_es.pdf) (p. 8)

<sup>xi</sup> Alaska Business Monthly, BBNC Shareholder Opposition to Pebble Mine Grows to 81 percent, Nov. 23, 2011, available at <http://www.akbizmag.com/Alaska-Business-Monthly/November-2011/BBNC-Shareholder-Opposition-to-Pebble-Mine-Grows-to-81-percent/>.

<sup>xii</sup> Bristol Bay and Lake Peninsula Boroughs Pebble Mine Survey (Oct. 2009), available at <http://www.renewableresourcesfoundation.org/sites/www.renewableresourcescoalition.org/files/resolutions-polls/Hellenthal%20Poll%20-%202014Oct09.pdf>

<sup>xiii</sup> Ballotpedia, *Alaska Bristol Bay Mining Ban, Ballot Measure 4 (2014)*, available at [http://ballotpedia.org/Alaska\\_Bristol\\_Bay\\_Mining\\_Ban\\_Ballot\\_Measure\\_4\\_\(2014\)](http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban_Ballot_Measure_4_(2014))

<sup>xiv</sup> Taryn Kiekow Heimer, First Poll in Lower 48 Shows Strong Majority of Americans Oppose Pebble Mine, NRDC Expert Blog, Dec. 6, 2011, available at <https://www.nrdc.org/experts/taryn-kiekow-heimer/first-poll-lower-48-shows-strong-majority-americans-oppose-pebble-mine>.

<sup>xv</sup> IUCN World Conservation Congress, Protecting the world's greatest salmon fishery in Bristol Bay, Alaska from large-scale mining, final version as adopted, Nov. 7, 2016, available at <https://portals.iucn.org/congress/motion/057>.

<sup>xvi</sup> Margot Roosevelt, Retailers to Hold Mine to Higher Gold Standards, LA Times, February 12, 2008

<sup>xvii</sup> Gunnar Knapp et al., Univ. of Alaska Anchorage Inst. of Soc. & Econ. Research, The Economic Importance of the Bristol Bay Salmon Industry (Apr. 2013), available at <http://fishermenforbristolbay.org/wp-content/uploads/2013/02/CFBB-ISER-FINAL-REPORT-5-10-2013.pdf>.

<sup>xviii</sup> EPA, An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska, 910-R-14-001A (Jan. 2014), available at [https://www.epa.gov/sites/production/files/2015-05/documents/bristol\\_bay\\_assessment\\_final\\_2014\\_vol1.pdf](https://www.epa.gov/sites/production/files/2015-05/documents/bristol_bay_assessment_final_2014_vol1.pdf).

<sup>xix</sup> Id.

<sup>xx</sup> EPA, Proposed Determination of the U.S. Environmental Protection Agency Region 10 Pursuant to Section 404(c) of the Clean Water Act Pebble Deposit Area, Southwest Alaska (July 2014), available at [https://www.epa.gov/sites/production/files/2014-07/documents/pebble\\_pd\\_071714\\_final.pdf](https://www.epa.gov/sites/production/files/2014-07/documents/pebble_pd_071714_final.pdf) (p. ES-5)

<sup>xxi</sup> Pebble Project Department of the Army Application for Permit (Dec. 2017), available at [http://www.poa.usace.army.mil/Portals/34/docs/regulatory/plp/12\\_22\\_2017\\_POA\\_2017-271\\_DA\\_Application\\_Pebble\\_Limited\\_Partnership.pdf?ver=2018-01-05-115756-287](http://www.poa.usace.army.mil/Portals/34/docs/regulatory/plp/12_22_2017_POA_2017-271_DA_Application_Pebble_Limited_Partnership.pdf?ver=2018-01-05-115756-287).

<sup>xxii</sup> EPA, An Assessment of Potential Mining Impacts on Salmon Ecosystems of Bristol Bay, Alaska, 910-R-14-001A (Jan. 2014), available at [https://www.epa.gov/sites/production/files/2015-05/documents/bristol\\_bay\\_assessment\\_final\\_2014\\_vol1.pdf](https://www.epa.gov/sites/production/files/2015-05/documents/bristol_bay_assessment_final_2014_vol1.pdf).

<sup>xxiii</sup> 33 U.S.C. § 1344(c).

<sup>xxiv</sup> *Id.*

<sup>xxv</sup> Proposal to Withdraw Proposed Determination to Restrict the Use of an Area as a Disposal Site; Pebble Deposit Area, Southwest Alaska, 82 Fed. Reg. 33123 (July 19, 2017).

<sup>xxvi</sup> *Mingo Logan Coal Co. v. EPA*, 714 F.3d 608, 613-14 (D.C. Cir. 2013) (italics added)

<sup>xxvii</sup> <https://www.alaskapublic.org/2017/10/04/walker-doubles-down-on-opposing-pebble-mine>

<sup>xxviii</sup> Ballotpedia, *Alaska Bristol Bay Mining Ban, Ballot Measure 4 (2014)*, available at [http://ballotpedia.org/Alaska\\_Bristol\\_Bay\\_Mining\\_Ban,\\_Ballot\\_Measure\\_4\\_\(2014\)](http://ballotpedia.org/Alaska_Bristol_Bay_Mining_Ban,_Ballot_Measure_4_(2014))

<sup>xxix</sup> [https://en.wikipedia.org/wiki/Augustine\\_Volcano](https://en.wikipedia.org/wiki/Augustine_Volcano)

<sup>xxx</sup> Ralph Andersen et al., *Pebble advisers must know the answer is still no*, Anchorage Daily News, Aug. 19, 2017, available at <https://www.adn.com/opinions/2017/08/19/pebble-advisors-must-know-the-answer-is-still-no/>.

<sup>xxxi</sup> Joe Chythlook, Proposed Pebble Mine a non-starter for Alaska, Vancouver Sun, Sept. 13, 2017, available at <http://vancouversun.com/opinion/op-ed/opinion-proposed-pebble-mine-a-non-starter-for-alaska>.

<sup>xxxii</sup> <https://www.unpri.org/about/the-six-principles>

TIFFANY & CO. CELEBRATES  
BRISTOL BAY, ALASKA  
ONE OF AMERICA'S  
PRICELESS TREASURES

The Bristol Bay watershed is the spectacular home of America's greatest wild salmon fishery and one of the most beautiful and pristine places on earth.

This is why Tiffany & Co. is so concerned about the proposal to locate an enormous gold and copper mine in the very heart of this watershed.

Tiffany & Co. and other jewelers have publicly announced that we will not use gold from the proposed Pebble Mine. Tiffany's experience in over 173 years of sourcing gemstones and precious metals tells us that there are certain places where mining cannot be done without damaging the landscape, wildlife and communities.

Bristol Bay is one such place.

As we weigh the inevitable risks against the promised reward of the Pebble Mine, we know there will be other gold and copper mines to develop. But we will never find a more majestic and productive place than Bristol Bay.

TIFFANY & CO.